

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (Currently amended): A method for heat treating a plurality of ~~metallic-microelectronic~~ conductive interconnect structures attached to a ~~non-metallic~~ substrate, the method comprising the steps of:

providing a contactor comprising a substrate and a plurality of conductive, interconnect structures, each of the interconnect structures is attached to a terminal on the substrate and comprises a contact tip disposed away from the substrate;

placing the ~~non-metallic substrate and the plurality of microelectronic structures~~ contactor in an oscillating electromagnetic field, the oscillating electromagnetic field heating the interconnect structures without substantially heating the contactor ~~whereby the plurality of microelectronic structures are heated by the oscillating electromagnetic field and the non-metallic substrate is essentially not heated by the oscillating electromagnetic field;~~

maintaining the ~~non-metallic substrate and the plurality of microelectronic structures~~ contactor in the oscillating electromagnetic field until each of the ~~plurality of microelectronic structures~~ interconnect structures obtains a defined heat-treatment temperature substantially greater than an ambient temperature and thereby improves a mechanical operating property of the ~~plurality of microelectronic structures~~ interconnect structure;

removing the ~~non-metallic substrate and the plurality of microelectronic structures~~ contactor from the oscillating electromagnetic field; and

cooling the ~~plurality of microelectronic~~ interconnect structures to the ambient temperature.

Claim 2 (Currently amended): The method according to Claim 1, wherein the ~~placing step further comprises placing the plurality of microelectronic structures in the oscillating electromagnetic field, wherein the plurality of microelectronic~~ interconnect structures are comprised of a ferromagnetic material.

Claim 3 (Currently amended): The method according to Claim 2, wherein the ~~placing step further comprises placing the plurality of microelectronic structures in the oscillating electromagnetic field, wherein~~ ferromagnetic material is a nickel-cobalt alloy.

Claim 4 (Original): The method according to Claim 2, further comprising tuning the oscillating electromagnetic field to selectively heat the ferromagnetic material.

Claim 5 (Original): The method according to Claim 1, wherein the maintaining step further comprises obtaining the heat-treatment temperature greater than 800°C.

Claim 6 (Original): The method according to Claim 1, wherein the maintaining step further comprises obtaining the heat-treatment temperature greater than 1300°C.

Claim 7 (Original): The method according to Claim 1, further comprising generating the oscillating electromagnetic field between a pair of parallel plates.

Claim 8 (Original): The method according to Claim 1, further comprising generating the oscillating electromagnetic field between arms of a hairpin coil.

Claim 9 (Original): The method according to Claim 1, further comprising generating the oscillating electromagnetic field using a coil comprised of a copper tube formed into a coil shape.

Claim 10 (Previously presented): The method according to Claim 1, further comprising tuning a frequency of the oscillating electromagnetic field to a resonant frequency of a field generator circuit.

Claim 11 (Previously presented): The method according to Claim 1, further comprising tuning a frequency of the oscillating electromagnetic field to between about 10 MHz-15 MHz.

Claim 12 (Currently amended): The method according to Claim 1, further comprising measuring a temperature of the ~~plurality of microelectronic~~ interconnect structures by applying a heat-indicating paint to the plurality of ~~microelectronic~~ interconnect structures prior to the maintaining step.

Claims 13-15 (Canceled)

Claim 16 (Currently amended): The method according to Claim 1 wherein the mechanical operating property of the ~~plurality of microelectronic~~ interconnect structures improved is at least one of improved yield strength, improved resiliency to fatigue, decreased brittleness, or improved hardness.

Claim 17 (New): The method according to Claim 1, wherein the contactor comprises an interposer and the plurality of conductive interconnect structures are disposed on opposing sides of the substrate.

Claim 18 (New): The method according to Claim 1, wherein the contactor is for contacting a semiconductor wafer.

Claim 19 (New): The method according to Claim 1, wherein the interconnect structures are springs.

Claim 20 (New): The method according to claim 19, wherein the mechanical operating property of the interconnect structures improved is a spring characteristic of the interconnect substrates.